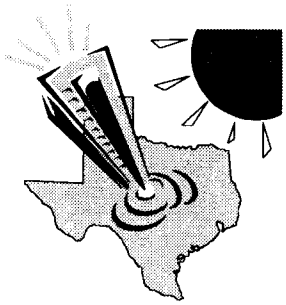
TDH TEXAS DEPARTMENT OF HEALTH **Texas Heat Wave**

*"Neighbors helping neighbors"*



# Sweating out a Texas heat wave

## *A guide to preventing hot weather illness*

Hot weather is a part of life in Texas, but months-long stretches or record-breaking heat and drought are extraordinary. No one ever is fully prepared for such a widespread emergency. During these prolonged heat waves, the risk of heat-related illnesses, injuries and deaths climbs dramatically. The most vulnerable Texans, and those who fail to recognize danger as it develops, need their families, friends and neighbors' advice and watchfulness to ensure their safety.

What is the danger?

According to health experts, one of the most dangerous factors during excessively hot weather is the addition of humidity. In Texas, warm, moist air most often arrives on winds from the Gulf of Mexico. That moisture greatly magnifies the harm created by high temperatures hundreds of miles inland from the Gulf. The combination of heat and humidity results in heat stress on humans and other animals. Victims of prolonged or high heat stress can develop heat cramps or heat exhaustion. If heat stress continues, the condition can progress to heat stroke and death.

Short-term high temperatures are physically tolerated by most people when the air is dry, but increased humidity intensifies heat's harm to people by interfering with the human body's main cooling system, the ability to perspire. Sweat is meant to evaporate from the skin surface, cooling the skin and the blood flowing through it. When humid air prevents evaporation from a person's skin, the body temperature rises higher, causing more sweating and fluid losses of up to one liter per hour.

If fluids and salts lost through perspiration are not soon replaced, dehydration and electrolyte (mineral) imbalances can occur. If dehydration becomes severe, or heat stress continues, the body tries to conserve fluid by stopping the sweating process. The result is a dangerous rise in body temperature.

### What are heat illness' symptoms?

The warning signs of heat illness can be mild or severe, but all are important danger signals. The most serious heat-related conditions are heat exhaustion and heat stroke.

Signs of heat exhaustion include: profuse sweating, paleness, muscle cramps, tiredness, weakness, dizziness, headache, nausea or vomiting, a weak-but-rapid pulse, fast and shallow breathing and fainting. If untreated, heat exhaustion can progress to heat stroke.

Heat stroke occurs when your body's cooling system fails. Sweating stops, and the body temperature can quickly exceed 106 F. Among heat stroke's symptoms are: an extremely high (usually more than 105 F orally) body temperature, red and dry skin, failure to sweat, rapid pulse, throbbing headache, dizziness, nausea, confusion, seizures and unconsciousness. Coma, paralysis and death can follow if emergency treatment is not immediately given.

### Who is most at risk?

Prolonged or intense heat stress can be fatal to anyone, but people older than 60 appear to have the highest risk for death from heat illness, especially if they are frail, or have pre-existing heart disease, respiratory problems or diabetes. To a lesser extent, babies and young children--especially those left unattended in cars or enclosures--people with histories of alcoholism and others using certain drugs and medications also are at high risk of heat-caused illness.

People most at risk of heat illness from exertion may include: athletes, military personnel, manual laborers, farm workers and people who have diabetes or are obese. Anyone unused to high temperature and humidity may become ill during exertion.